BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the Self-Generation Incentive Program and Related Issues

Rulemaking 20-05-012
(Filed May 28, 2020)

COMMENTS OF THE GREEN HYDROGEN COALITION ON THE PROPOSED DECISION REVISING SELF-GENERATION INCENTIVE PROGRAM RENEWABLE GENERATION TECHNOLOGY PROGRAM REQUIREMENTS AND OTHER MATTERS

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I. INTRODUCTION.

GHC is a California educational non-profit organization. GHC was formed in 2019 in recognition of the game-changing potential of “green hydrogen” to accelerate multi-sector decarbonization and combat climate change. GHC’s mission is to facilitate policies and practices that advance green hydrogen production and use in all sectors of the economy where it will accelerate a carbon-free energy future. Our sponsors include both renewable energy users and developers and supporters of a reliable, affordable green hydrogen fueled economy for all.

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accelerate a carbon-free energy future. Our sponsors include renewable energy users and developers, utilities, and other supporters of a reliable, affordable green hydrogen fueled economy for all.

Given current climate conditions in California and the expectation for yet another summer beset with wildfires and extreme weather, there is a timely need for the Self-Generation Incentive Program (“SGIP”) to deploy projects to help the grid, provide resiliency benefits, and reduce future greenhouse gas (“GHG”) emissions that would further contribute to climate change and these challenging weather trends.

GHC is generally supportive of the Commission’s efforts to expand SGIP eligibility to include renewable hydrogen. We believe that hydrogen will play an important role in advancing SGIP goals outlined in D.16-06-055, including reducing GHG and criteria pollution, supporting the grid, and transforming the market.\(^2\) GHC commends the proposed expansion of SGIP eligibility beyond green electrolytic hydrogen defined in SB 1369 (Skinner, 2017) and appreciates the focus on “Broadly defining SGIP-eligible renewable hydrogen fuels” which “supports development of a variety of distributed generation projects using a variety of feedstocks, electricity sources, and methods, and in so doing advances California’s decarbonization goals by encouraging innovation.”\(^3\) However, GHC provides several key recommendations below to ensure the directives provided in the PD are consistent with this focus.

II. THE PD OFFERS INCONSISTENT TREATMENT OF BIOGAS AS A RENEWABLE FUEL.

\(^2\) D.16-06-055 at 9-11.  
\(^3\) PD at 37.
SGIP has long included biogas as an eligible renewable fuel under SGIP. While the PD limits directed biofuel eligibility to biofuels produced within California, it does maintain its support for biogas as a renewable fuel and promotes the biogas-to-power use case.\(^4\) The PD notes that the use of instate biofuels for power will offset “grid electricity that customer would otherwise use, which reduces both greenhouse gas and criteria pollutant emissions associated with grid electricity generated by gas-fired power plants.”\(^5\) The PD also notes additional benefits including reducing flaring and associated criteria pollutants, reducing odors, and avoiding “adverse impacts on California waters”.\(^6\) Lastly, SGIP projects using biogas advance SB 1383 goals to reduce disposal of organic waste.\(^7\)

While clearly stating the benefits of biogas for California, the PD does not allow SGIP eligibility for hydrogen produced by these biofuels via steam-methane reformation. The PD states that hydrogen produced via steam-methane reformation using biogas will be ineligible for SGIP because “the process creates carbon dioxide emissions”\(^8\) and is a “less efficient use of limited biomethane supplies.”\(^9\) GHC is concerned that this finding is inconsistent with the goals of SGIP, given the potential for emerging technologies to reduce or eliminate the carbon dioxide emissions associated with the biogas-to-hydrogen-to-power use case. GHC believes the record of the proceeding offers considerable evidence that the conversion of biogas to hydrogen advances SGIP goals of reducing GHG emissions and criteria pollutants, supporting the grid, and transforming the market.\(^{10}\)

\(^4\) PD at 19.
\(^5\) PD at 21.
\(^6\) PD at 21.
\(^7\) PD at 19.
\(^8\) PD at 38.
\(^9\) PD at 39.
\(^{10}\) Bioenergy Association of California (BAC) Comments on Ruling Seeking Party Comments at 10 and 14, California Hydrogen Business Council (CHBC) Reply Comments on Ruling Seeking Party Comments at 4,
GHC also questions whether it is prudent to prohibit the biogas-to-hydrogen-to-power application, or any technology set, based on a narrow focus on efficiency. Real-world project economics rely on much more than technology efficiency to realize GHG benefits and support the grid, as certain tradeoffs may be made by customers and developers based on the specific needs and location of the customer.

Additionally, the Low-Carbon Fuel Standard (“LCFS”) regulation includes hydrogen produced from biofuels as an eligible resource.\textsuperscript{11} GHC believes it is important to align SGIP eligibility with the LCFS regulation in order to ensure consistency across programs and send a clear signal to market participants.

GHC respectfully requests the PD be revised to expand SGIP eligibility to the set of renewable fuels – including the biogas-to-hydrogen-to-power use case – that can support GHG and criteria pollutant reduction, grid reliability, and backup power needs. By expanding SGIP eligibility to include a broader set of hydrogen production pathways (i.e., including hydrogen produced from reformation of biogas), the Commission can return to its position of global leadership in designing and implementing SGIP eligibility based on GHG benefits, grid support, and market transformation needs.

**III. THE POTENTIAL PRECEDENT THAT HYDROGEN PRODUCED FROM BIOGAS SHOULD NOT BE CONSIDERED ELIGIBLE MAY JEOPARDIZE**

\textsuperscript{11} Title 17 section 95481 of the CCR. (131) “Renewable Hydrogen” means hydrogen derived from (1) electrolysis of water or aqueous solutions using renewable electricity; (2) catalytic cracking or steam methane reforming of biomethane; or (3) thermochemical conversion of biomass, including the organic portion of municipal solid waste (MSW). Renewable electricity, for the purpose of renewable hydrogen production by electrolysis, means electricity derived from sources that qualify as eligible renewable energy resources as defined in California Public Utilities Code sections 399.11-399.36.
PROGRESS ON CRITICAL AND TRANSFORMATIVE ONGOING EFFORTS RELATED TO GREEN HYDROGEN.

GHC notes that the PD “does not adopt a definition for green hydrogen or renewable hydrogen but only identifies the types of hydrogen fuel that are eligible for SGIP incentives at this time.”\(^\text{12}\) GHC appreciates this distinction but is concerned that the eligibility considerations set forth by the PD may establish an unintended precedent that biogas-to-hydrogen-to-power should not be considered eligible for future programs and incentives. Notably, Governor Newsom recently released his revised budget proposal for FY 2021-2022, which detailed $110 million for green hydrogen production.\(^\text{13}\) GHC also notes that important work is currently underway in the state legislator to advance green hydrogen – for example, SB 18 introduced by Senator Skinner on December 7, 2020 – and the relevant stakeholders are collaborating to ensure hydrogen is defined broadly. While these key drivers are not yet formalized, it is important that hydrogen eligibility within SGIP be revisited to accommodate a broader definition to advance green hydrogen commensurate with the proposed budget and legislation.

IV. CONCLUSION.

GHC appreciates the opportunity to submit these comments in response to the April 29, 2021 PD. We look forward to further collaboration with the Commission and stakeholders on this initiative.

Respectfully submitted,

Janice Lin

\(^{12}\) PD at 39.
\(^{13}\) [http://www.ebudget.ca.gov/FullBudgetSummary.pdf](http://www.ebudget.ca.gov/FullBudgetSummary.pdf) at 131.